THE VETERINARY RECORD

A Weekly Journal for the Profession.

EDITED BY WILLIAM HUNTING, F.R.C.V.S.

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MORE VETERINARY HONOURS.

Last week we had the pleasure of noticing the fact that Maidenhead had conferred upon Mr. James Simpson the honour of electing him to the Mayoralty. and we pointed out how such honours to our members reflected credit upon the whole profession. This week we have to announce that Barnstaple has also selected a veterinarian to fill the highest office in the local government. The newly-elected Mayor of Barnstaple is Mr. William Penhale, F.R.C.V.S., who is well known in the profession as President of the West of England V.M.A. On another page will be found an extract from a local newspaper showing what his fellow townsmen think of him. His professional friends value him quite as highly. and we have no doubt that Mr. Penhale's year of office will be marked by success and general satisfaction. One of the most important duties of the modern civic chief is to look after the health of the citizens. Sanitary science and hygiene are now prominent questions, not merely because they are more wanted as populations become denser, but because we are now, for the first time, becoming acquainted with their underlying principles. Bacteriology and chemistry have so widened our knowledge of life and disease that we are able to take collective action for our protection with some certainty of effect. Mr. Penhale was a delegate to the recent Hygienic Congress; he showed great interest in its proceedings. and we have a pleasant recollection of our meeting there. Needless to say he possesses qualities which render him specially fitted for his new position. To the strong common sense and genial disposition, which are equally necessary to success in all callings, he adds an active intelligence, and a deep interest in all matters pathological and hygienic. He possesses, in short, taste and capabilities which command success in whatever direction he applies them; and all who know him will agree that he deserves the honours which have been conferred on him.

ORMONDE AS A STUD HORSE.

A speculative business man recently hit upon the brilliant idea of bringing Ormonde back to this country as a stud horse. The cost of doing so would be about £40,000 but by heavy stud fees and an insurance a fair probability of large profits was shown. Unfortunately for the scheme its promoter tried to enlist the sympathy and assistance of the Rt. Hon. Henry Chaplin, who in a letter worthy of a Minister of Agriculture, declined all aid. To this Mr. Hume-Webster replied by attempting to show that the defect of "roaring" was by no means serious, that the produce of well-known roarers had won first-class races, that there were instances of the offspring of unsound parents being sound, and that *some eminent veterinary authorities* denied that "roaring" was hereditary. We should much like to know one of these, and would gladly afford him any space he might require to state his facts and opinions. The possibility of profitably breeding from a confirmed roarer is not disputed. By disposing of the produce early it is quite likely that the seller will get rid of his stock before the advent of visible disease. Even the buyer of such animals has, in the lottery of horse racing, a chance of finding his return before the disease reaches a degree to unfit the animal for gambling purposes. To the racing man or speculator a horse that is a roarer or that suffers from any other hereditary disease is neither better nor worse for his infirmity except as it effects his individual value. To the sportsman or statesman, who takes a higher and wider view, the grandest and fastest horse that ever lived is a danger and evil to his species when suffering from a transmissible disease and employed for stud purposes. Mr. Chaplin puts the whole question very concisely thus—"It is very probable, I admit, that he (Ormonde) would become the sire of a number of speedy animals and of many winners of short races. It is also possible that his return might be made successful as a commercial speculation, but that it will inevitably tend to still further spread that most injurious disease and to propagate a race of unsound horses through the country, there cannot be a doubt to anyone who is conversant with breeding."

VETERINARY EDUCATION.

We desire to direct attention to an article by Mr Raymond on veterinary education which will be found in this week's *Record*. It is very opportune, as it is well known that our Council will soon be required to give a practical answer to the questions he discusses. We allow he proves conclusively that the medical profession in this country exacts a higher standard of general and technical education than is now demanded of veterinary candidates. We must also admit that the French veterinarian has to give evidence of a wider and more thorough training than his British *confrère* before he obtains a diploma. On the other side we may point out that the French Schools are supported by Government and probably give their training at a cost much below that incurred by a student here. The medical profession here draws graduates from a class of persons moving in a higher social grade and possessed of greater wealth than the class which replenishes our ranks. The cost of entry to a calling generally bears some relation to the remuneration to be obtained by its practitioners, and even if it be granted that the average veterinarian reaps as good a reward as the average surgeon, it cannot be denied that our profession offers no great prizes to entice the ambitious or to reward the highest attainments.

CASES AND ARTICLES.

SUBCUTANEOUS WORMS IN A DOG.

By A. H. Jacobs, M.R.C.V.S.

I received a fox-terrier dog from Algiers on the 22nd September. 1891. The dog was in good condition about four years old, and had been in Algiers a couple of years. About three months before I saw him some parasites appeared to break out through the skin, and, after being tried with several remedies, he was sent to me. I find that the dog was very fond of going into any water, and lying out on the grass early in the morning, after a heavy dew; but, though fat, was very dainty with its food.

Ordinary vermifuge remedies had no effect. I tried an injection of tincture of areca nut. 1 to 8, and the parasites appeared to crawl out in every direction about ten minutes afterwards; the parasites appeared from different sores on the body—viz., both inside and outside of thighs. fore legs, under belly, and from the lips and nostrils. When out at exercise the dog continually fainted; and when it came to appeared none the worse. It did very well up to the last day, October 10th, when it fainted in its kennel and never recovered.

The *post-mortem* (in which Mr. Stidston, M.R.C.V.S., kindly assisted me) is as follows: Heart very much enlarged, but otherwise healthy; the intestines, stomach, liver, kidneys, and lungs, in perfect order. Sores from where the parasites appeared externally were on both outside and inside of fore and hind legs, on belly, and lips and nostrils. We also found parasites between the muscles and under the skin.

I have sent you a leg for further examination, so that you may see the parasites *in situ*. Their average length seems to have been about eight or ten inches long, and their diameter, such as is shown by the ordinary tapeworm of the dog; but they are not, like that parasite, jointed. There was some irritation of skin, but comparatively little until the worms perforated the skin.

[We thank Mr. Jacobs for the very interesting and rare specimen he has sent. The parasite is apparently the Guinea worm, well known to human surgeons in Africa. We have forwarded the dog's limb to the Royal Veterinary College, and shall refer to the parasite again when its identity is recognised.—Ed.]

FEEDING AND BUTTER FLAVOURS.

That the food of which a cow partakes exercises considerable influence on the flavour of the butter produced from her milk is familiar knowledge. The effect of a change of diet from ordinary winter food to fresh spring grass, or clover, is easily recognised by the sweet, luscious taste of the cow's milk-produce. Fed on turnips the flavour becomes disagreeable and nauseous. It is impossible, however, to predicate by the appearance or odour of any particular kind of cattle-fodder—of herbage or any other kind—whether it may or may not act injuriously on the milk or butter of cows fed thereon. Ensilage has neither an enticing appearance nor pleasant odour, judged by human optical and olfactory senses; yet it imparts no objectionable taste to the butter made from ensilage-fed cows.

Many years ago the late Dr. Bird, a retired Army medical officer, of long Indian experience, informed me of something strange in relation to this immediate subject; at least it was a revelation to me. He stated that in the portion of India in which he resided the sanitary arrangements of the natives were very primitive. Like the children of Israel, they "went outside the camp," and the cows in the fields adjacent to the village regularly devoured the fæces. For a time he and all those of his household who were aware of the fact, shunned the milk derived from cows with such an apparently depraved appetite. It could not be sweet; it could not be healthy. They soon, however, discovered that it was perfectly palatable—as sound and sweet in every respect as if it had been produced by the best-fed cows in any London or country dairy. It would be interesting to know how far Dr. Bird's statement can be corroborated.

Twenty years ago a new system of feeding cows, practised by Mr. Schwartz, of Hofgarten, on Lake Weter, was described in English journals. Mr. Schwartz mixed up stable waste—horse manure, in fact—with the provender he gave to his cows. He was led to do this principally from reading an old Swedish "muck manual" and partly from original observation—he having frequently witnessed the peculiar habit of a short-horn bull that consumed stable waste with avidity and with manifest relish. Mr. Schwartz gave, it is said, as much as 8 lbs. per day of this newly-discovered feeding stuff to each of his dairy cows, and found it had a most favourable effect on the amount of milk and butter produced by his herd without deteriorating the quality. He asserted that, by his new method of feeding, he could keep from thirty to forty more cows on his farm than formerly. I am told also that, in bad seasons, it is not uncommon in the north of Scotland to eke out the winter food supply for the cattle with dry horse-dung, and that in Norway "this is carefully preserved as food for the cows, which without it could seldom live through the long Scandinavian winter." Does the butter lose its savour thereby?

I am tempted to enter on the subject of the influence of certain foods on the flavour of meat, but for the present I refrain. Menevensis.

"VETERINARY ELECTORAL DISTRICTS."

By C. Cunningham, Slateford, Edinburgh.

The scheme of "Veterinary Electoral Districts," or, as it is more properly called, "Parliamentary Representation in Council," was "first mooted by a practitioner in Scotland" nine years ago (Dec., 1882), simply as "another step in the way of improvement and progress."

That "practitioner" believed that, under the existing system of election, the veterinary surgeons of Scotland especially neither were nor ever would be properly represented in Council. He was also of opinion that much of the prevailing dissension and disunion and indifference among the members of the veterinary profession was due to partial and imperfect representation of that profession on its Council; and he brought forward his scheme as a plain, unpretending endeavour to remedy what he looked on as an evil, and to try to ensure that every part and section of the body-corporate throughout the United Kingdom should be properly and directly represented on the Council of the Royal College of Veterinary Surgeons.

The scheme was only a copy or modification and adaptation of our Parliamentary system of election. The House of Commons may be said to be the great council chamber of the nation, and for the return of its members the country is divided into several hundreds of electoral districts or constituencies, and at a general election each of these electoral districts or constituencies sends its own special representative. The Council of the Royal College of Veterinary Surgeons is the legislative and governing assembly of the veterinary profession, and the "practitioner in Scotland" simply wished to see its members elected on the same principle—on a Parliamentary basis.

It was proposed to form thirty-one or thirty-two of these districts or constituencies, approximately—"eighteen in England (Wales included), six in Scotland, three in Ireland," one assigned to each of the four veterinary colleges, with, if practicable, the return of one or two representatives of the Army. The Council thus wholly elected by the profession. No account taken for obvious reasons of members in foreign parts, nor of veterinary medical societies. It was plainly stated that the object of the proposal "was *not* to secure the return of local men, or to set up a nationality system," and the movement was supported on the grounds of "justice, expediency, and economy, and its probable good effects on the profession at large" (see *Veterinarian* and *Veterinary Journal*, July, 1884).

No one dubs our Parliamentary system—"territorial representation" or an "election by countries," or "a division into five or six sections for electoral purposes." No one surely considers that "any definite number of Members of Parliament shall per force and for certainty be selected from a certain district, or that they shall per force and for certainty be selected upon local considerations." The constituencies take the best candidates they can get, no matter where they hail from; and it would surely be strange language to learn that our House of Commons is remarkable for its "narrow prejudices and cliques incapable of united action," and that fortunately our Parliamentary system of election is as "thoroughly impracticable as it is utterly unnecessary." Take away the respective electoral rights of every large and small constituency, merge them and the country in a big annual general plebescite in which numbers and populous centres swamp their less fortunate neighbours, and you have exactly the system which prevails in the veterinary profession at the present moment.

In April each year upwards of 2,500 voting papers are issued—a proceeding as stated entailing considerable work and expense. These voting papers travel broadcast all over the country, and some across the seas—whence a few of the latter return months after the election is past. On these voting papers are the names of candidates, some well known to the profession, others comparatively unknown, and the honest elector often fills in his paper in a half-hearted hap-hazard way inwardly conscious that he has perhaps unwittingly given his votes not altogether wisely and well. It may be in his difficulty he applies to his neighbour to find that he is no better informed, or he reads in his weekly journal that "it is measures not men this year," and he gives his votes as advised. One voter returns his paper promptly, another forgets, and a third drops it into the waste paper basket; the election of six members to the Council of his profession is a matter of indifference to him. A large influential Veterinary Medical Society in the South takes annually a deep interest in these elections—year after year by the power of its numbers it easily secures the return of its chosen candidate. A small Society in the North rarely thinks of such a thing, its members know that unless they select a professor they have little chance. Were the 300 or 400 veterinary surgeons in Scotland to combine as one man they would fail to secure the return of one member to Council unless aided in numbers by their friends on the other side of the Border. How a Council thoroughly representative of every part and section of the veterinary profession throughout the Kingdom can be elected by such a system as this—"the practitioner in Scotland" fails to see—hence his little scheme of "Veterinary Electoral Districts or Parliamentary Representation in Council."

That the present system of general election by voting papers is immensely superior to that of the past, conducted by little more than a show of hands at the Annual General Meeting in London each May, no one is more willing to admit than the practitioner aforesaid, and all honour and praise to the men who effected the change, but there is room for improvement, and considerable improvement in the existing mode of filling our Council chamber. This surely should be the first plank in the platform of the proposed New Charter.

The past history of the profession—its division into two opposing sections—the long continued rivalry and disagreement between the Highland Society and the Royal College of Veterinary Surgeons, very plainly indicate the benefits that might have accrued from, and the great need for, even territorial representation; while the more recent and even more to be regretted division into Members and Fellows, in so far as relates to the Council and Examining Board, as plainly show how totally unrepresentative of the profession was the Council of 1876, and preceding years. "The new blood infused into the Council" owes its existence, in a great measure, to the flagrant injustice of the Ninth Clause, and this new blood proposes to open the door

of the Council to Members, and reserve the Examining-room to the Fellows—it will allow an Examiner to sit in his appointed place and room, but debars his admittance into the Council. This new blood apparently thinks it quite right that our Southern friends should have power by the force of their numbers to send 20 or 30 members to Council, while the veterinary surgeons of Scotland can scarcely send one. The "practitioner in Scotland" fears that the "new blood," is very like the old, but trusts that "better counsel may yet prevail."

EDUCATION.

By Capt. F. Raymond, F.R.C.V.S.

I gather from your Editorial of Saturday last, that you are disinclined to support any change in the standard of general education, and that you are not prepared to recommend any extension of the present course of professional study. At the same time, I fancy I can detect in your note that you are open to conversion. Now I wish to convince you and your readers that we are quite behind the times—1st, that our educational standard must be raised, and 2nd, that our course of professional study must be prolonged; and 3rd, that these changes should be considered at once by the Council.

I propose to compare our preliminary with that of allied callings. What are the subjects a French veterinary student has to pass in before he can enter a college? According to the following extract from *The Record* of the 24th May, 1890, translated by Mr. Jno. A. W. Dollar, the examination (which is competitive) embraces—

Arithmetic up to decimal fractions, cubic roots, interest, etc., etc.

Algebra, to equations of the second degree, with one unknown quantity, etc.

Geometry, plane and solid, up to determining surface and volume a sphere.

Physics: Properties of matter, pneumatics, hydraulics, heat, light, magnetism and electricity.

Chemistry: Elementary inorganic.

Natural History: Comparative anatomy of vertebrates and invertebrates.

Botany: Structural botany, natural order, *(a)* dicotyledons, six orders, *(b)* monocotyledons, two orders.

Geology: Rocks, primary, secondary, tertiary quaternary, weathering of rocks, fossils, prehistoric man. Soil of France."

Please compare the above with our preliminary examination. Unless you believe that an English veterinary surgeon should be less educated than a Frenchman, I am afraid you will be compelled to change your position; but let us come back to England and study the preliminary examination of the General Medical Council. It comprises:—

(a) English language, including grammar and composition.

(b) Latin, including grammar, translation from specified authors, and translation of easy passages not taken from such authors.

(c) Mathematics, comprising (*a*) arithmetic, (*b*) algebra as far as simple equations inclusive: (*c*) geometry, the subject matter of Euclid, books I, II and III, with easy deductions.

(*d*) One of the following optional subjects—1 Greek, 2 French, 3 German, 4 Italian, 5 any other modern language, 6 logic.

You may tellme that this is for medical students and that they are superior to veterinary students; I defer, but it is not worth arguing. You will admit, probably, that a dental student is not superior to one of ours; at any rate, that a dentist is not the superior of a veterinary surgeon. Well, a dental student has to pass the same general education as the medical student.

You say "forward, but not too fast." Now, the question of general education has been before the profession for at least two years: eighteen months have passed since Latin was added. The standard cannot be raised without a delay of eighteen months (in justice to parents); so let me ask you seriously is it still your conviction that it will be unsafe to have a higher standard in 1893; if it is, when do you think it *will* be safe?

It has just occurred to me that all your readers may not understand what these different standards mean; I will try to make it clear.

The educational examinations of the College of Preceptors are divided into three classes—the first, second, and third. The second class, which is the one that concerns us, is sub-divided into three. The subjects for examination are the same in each subdivision but the candidate must obtain more marks, the higher the sub-division. Thus to pass No. 1 division a student must get at least 700 marks; to pass No. 2 division he must obtain 550 at least and to pass No. 3 division he must score a minimum of 400. The dental preliminary examination differs slightly from that of the College of Preceptors, and our preliminary also differs; but for the sake of illustration I will assume that the dental is equivalent to No. 2 division, No. 2 class—then our examination would be equivalent to an easy No. 3 division, No. 2 class. To make the matter plainer, I will say that the dental student must get at least 550 marks and a veterinary student would probably squeeze through with 380 marks. This statement is only intended as an approximate illustration, not absolutely correct; but the relative proportions are about correct. I have been informed by one of the highest authorities in England on this subject, that a boy of average intellect and application at a good school can pass the preliminary educational of the General Medical Council at the age of 16 years without difficulty. Therefore if the boy were destined for our profession he would have five years for professional education, before he could legally obtain his diploma. I suggest that out of the five years one should be spent with a practitioner; from October to May of the other four should be devoted to study at the colleges, and the summer months should be spent with a practitioner; thus, the student would have studied four years and spent

three in pupilage. Are you aware. Sir, that dental students do not obtain their diplomas until they have engaged in professional study for four years and have received three years instruction in mechanical dentistry from a qualified man—besides, of course, passing examinations.

You say "When we have advanced a little further in public estimation, and when other callings have raised their standard of education and culture it will be time for us, etc., etc." You cannot reasonably expect that public estimation is to come first and that we are then to live up to it. As regards the standard of other callings, it is generally admitted that it is in every instance far above ours. You twice allude to rich men and their sons. Now, I have shown on good authority that if parents do their duty to their sons and the boys are average boys, they can get their diplomas at the age of 21, according to my plan. It is for the parents themselves to judge whether it is cheaper for their boys to be at work or merely loafing about. As to boys below the average intellect and application, I take it for granted that you agree with me they are not required; it is simple charity to stop them. The natural result of a low educational standard is that failures in all other spheres of life can drift into our profession and help to overcrowd, whereas when our people desire to travel into other professions they are at once blocked by the want of the necessary educational certificates. You say "the want in our candidates is thoroughness, and our duty is to deepen more than widen the course of study required." The worst of these Emerson-like paragraphs is that they do not necessarily support the argument of their propounder. If it were proposed to make astronomy, navigation and bicycling part of the professional education the warning would come in nicely; but as we only desire to provide a student with a deeper knowledge of his subjects, and that he shall have as good a general education to start on as his neighbours, your remark seems rather to support our position, instead of yours.

You say "the remuneration offered by our calling is not yet sufficient to ensure any adequate return . . . . . etc., etc." How many years do you propose to wait? knowing that for every man that dies about three enter the profession. If this argument were reasonable we ought to set about lowering the standard all round. An increased standard is all to the advantage of practitioners' sons, for their course of study is laid out from infancy; all they have to do is "to keep between the flags."

I now come to the question of professional education. You say, "We desire that our members should show at least the same progression as others." Now if I can prove to you that even as regards professional education we are behind our neighbours; and whereas they press forward we are only marking time; if, I say, I can do this, then I may fairly claim that you shall come over to my views.

Referring to Mr. Dollar's translation I find that in France the veterinary students have to study for four years; those who are unable to pass into a higher class after one trial are struck off the roll. The examinations comprise:—

1. *Anatomy* of the domestic animals and the exterior of the horse.
2. *Physics*, chemistry, pharmacy and toxicology.
3. *Natural History* and materia medica.
4. *Physiology* of the domestic animals, and physiology (pure) and therapeutics.
5. *General Pathology*, medical and surgical pathology, clinical medicine and surgery, manual operations, and shoeing.
6. *Pathology* of contagious diseases, sanitary police, meat inspection, jurisprudence, laws as to sale of animals.
7. *Hygiene and Zoology.*

To summarise:

In France they have (1) a competitive preliminary examination which is (2) much more difficult than ours; (3) the student must study four years, and (4) at least two more subjects than in England; and (5) if he fails at any examination *once* he is struck off the roll and can only be replaced by a special order of the Minister. As regards the dental profession, I have already stated that their preliminary examination is above ours. they must study four years and serve three years' pupilage. We now come to the medical. I have spoken about their general education; their professional education, which hitherto has occupied four years, will, within the next few weeks, be prolonged to five years. While the doctors are advancing to five years, you wish us to stop at three, when even the French veterinarians and the dentists have left us behind long ago.

If we are to go on with the times the educational test must be put on a level with the dental, and we must have a four years' course of study.

In order that no one shall suffer any hardship, I recommend that eighteen months' notice be given to the parents through the College of Preceptors, before the educational test is raised, and that no student at college at the time the Council passes the four years scheme, shall be in any way affected by it; or if another arrangement is preferred a three years' notice might be given from the time the scheme is sanctioned by the Council.

We may differ even now as to the desirability for a higher education, though I hope I have converted you; but on one point I am sure there can be no dispute, namely, that we are miles behind our neighbours.

[The above arguments, we confess, have shaken our faith but we shall give them careful consideration before allowing that they are conclusive.—ED.]

VETERINARY SOCIETIES.

ROYAL VETERINARY COLLEGE V.M.A.

At a meeting of the above Association, held in the Theatre of the College, on Wednesday, November 11th, at 6.30 p.m. before a large assembly of members. Mr. H. Bidlake, read an Essay on "Lameness, with some reference to the use of the Firing Iron."

In commencing Mr. Bidlake placed stress upon the very great importance of the subject, as being one which might be easily observed daily, so many opportunities being given in all our large towns. He stated that the most common cause was "Pain"; and divided his subject under two heads, viz:—General and Local. Amongst other things the Essayist mentioned Strangles, as causing lameness through weakness, Corns, Sprains and various Bone Diseases, and briefly treated with some of the methods of detection during progression. In conclusion various remedial measures were mentioned, the chief of which were rest, hot and cold water, and counter-irritation, dwelling particularly on the use of the Firing Iron and giving illustrations where great benefit had accrued after other means had failed to effect a cure.

An interesting discussion afterwards took place in which a large number of the members took part, the chief energies being directed towards a decision as to where lies the centre of gravity in the horse. A vote of thanks to the Essayist brought the proceedings to a close.

F. Hobday, *Assist. Sec.*

SOUTHERN COUNTIES VETERINARY MEDICAL ASSOCIATION.

A meeting of the above Association was held at the "First Avenue Hotel," Holborn, on Wednesday, Sept. 23rd. Owing to the absence through ill health of the President, J. F. Simpson, Esq., was elected as chairman. The members present were Messrs. F. Raymond, A.V.D. F. W. Wragg, A. C. Piesse, W. A. Edgar, T. B. Goodall, J. D. Barford, Prof. F. Smith, A.V.D., and the Hon. Sec.

Numerous letters and telegrams were read from members regretting their inability to attend. Amongst those present as visitors were Messrs. H. W. Singleton, Wm. Wright, S. H. Slocock, J. A. Woods, A.V.D., W. S. Adams, A.V.D. and W. Hunting.

The minutes of the last meeting having been read and confirmed, Mr. E. W. Baker, of Wimborne, was elected a member of the association. The Hon. Sec. proposed and Mr. Goodall seconded, that Mr. J. T. Burden of Beaulieu, be nominated a member of this association.

Mr. Edgar, of Dartford, exhibited the spleen of a horse which gave the appearance of having been ruptured and to have subsequently healed. The death of the horse which occurred that morning was due to rupture of a large blood-vessel in the chest, and he did not consider the condition of the spleen to be in any way connected with the death of the animal.

Mr. Hunting said he had observed this condition and he might mention that the horse slaughterers in London recognised it as not uncommon.

Prof. Smith had seen several cases very similar, especially in India. At first he considered them as cicatrices of former rupture, but he had come to the conclusion that rupture of the spleen could hardly be of so frequent an occurrence without the animal showing some unmistakable signs of ill health.

Mr. Goodall showed some well prepared specimens of horse's skulls, showing the developement of the teeth and in one case disease of the superior maxillary bone, owing to the non-shedding of the anterior molars, a defect he had often noticed in three year olds.

He was induced to bring these specimens, bearing in mind that Professor Smith was to lecture on the Facial Sinuses, diseases in which he thought the teeth often played a prominent part.

The Diseases of the Facial Sinuses of the Horse.

By Prof. F. Smith, A.V.D.,
Army Veterinary School, Aldershot.

Mr. President and Gentlemen,

I am very sorry that some of the specimens I have here are not in very good condition. They are not perfectly prepared. That is my misfortune rather than my fault. Still I brought them because they illustrate several conditions, both anatomical and surgical, which I have to bring before you this evening.

We can understand the solids and the fluids of the body becoming diseased, but one would almost have thought that the cavities of the body might to a certain extent have claimed exemption. We know, however, that whether the cavity is lined, by a serous or mucous membrane that it has no exemption from disease. In the chest or peritoneal cavity we know that inflammation is frequently followed by an effusion of serum; and in the cavities of the head, a mucous or muco-purulent collection is the outcome of inflammation of the extension of the pituitary membrane. I purpose, however, before going on to a consideration of the surgery of the facial sinuses, to take you somewhat over the ground which we have all gone over in days gone by, namely, the anatomy of the parts. According to anatomists we have five sinuses on either side of the head, but I should like particularly to point out that although, anatomically, we have all these sinuses, yet I would rather, from a surgical point of view, say we have two large sinuses on either side of the head; the upper of which lies beneath the frontal and a portion of the nasal bones, and extends into the sphenoid; and the lower occupying the inferior half of the superior maxillary bone, and extending into the lower turbinated bone. I think, for surgical purposes, that is sufficient for our requirements, because we certainly observe, where we have a disease affecting the superior maxillary bone, that, in almost every case the frontal bone is also affected. The specimen which I exhibit shows very clearly indeed the arrangement and position of these sinuses. The upper of which extends underneath the frontal, and for some distance under the nasal bones; has a very large and most extensive communication with the upper part of the superior turbinated bone, and also communicates with the whole of the superior maxillary bone; excepting its most anterior part. It is no doubt a most extensive sinus, and, moreover, posteriorly, it communicates with the sphenoid and the upper part of the ethmoid bones. Our lower sinus is separated most distinctly from our upper by a very delicate plate of bone, which is usually found opposite to the 4th and 5th molar teeth. Anatomists have described this as the inferior maxillary sinus, and it communicates with the lower turbinated bone. I do not think anatomists make it perfectly clear that the upper sinus in a horse's head communicates with the upper portion of the turbinated bone. I think it is of importance because it is one of those parts we must certainly be able to get at in order to cure the condition which is spoken of as nasal gleet. The same membrane lines all these parts, and the diseased process will extend into them with equal facility; so that our treatment must be as thorough as possible if we are to reach these cavities. The upper part of the superior turbinated bone communicates with the upper sinus, and the upper part of the inferior turbinated bone with the lower sinus. All are lined with a mucous membrane which is a reflection of that which lines the inside of the nostrils, and which passes through a common opening in the middle meatus. This common opening is generally opposite the 4th and 5th molar teeth, it is very small in the fresh specimen and

sometimes you have the very greatest difficulty in getting even a probe into it. It is never sufficiently large to be seen unless you push aside the turbinated bones when two depressions are visible one of which corresponds with this opening. Why I particularly dwell upon this—is this—that I shall have in a few minutes to talk about the treatment of this disease, and when I see men syringing solutions up the nostril with the object of getting into these cavities, and I know that 25 minutes hard work is entailed to expose that opening, I say to myself, how is it possible that these remedial agents can find their way into these large air sacs inside the horse's head? In other words I hold that it is an absolute impossibility for any agents injected up the nostril to find their way into the upper or lower sinus. As to the use of the facial sinuses, perhaps we are correct in saying that their great object is to afford a certain amount of bulk; and by the fact that they are filled with air, they enable the horse's head to be of due proportion, without excessive weight. We have other diseases which I shall only touch upon this afternoon, and which are not of the same practical importance owing to their rarity. For instance (specimen exhibited) here we have the case of a bony tumour of the antrum, the principal maxillary sinus, producing an enormous amount of disturbance and disfigurement. Here is a drawing I made of this horse, which will give one some little idea of the amount of disfigurement which existed during life. This enormous bony growth impinged to such an extent upon the eyeball that the animal never opened his eye at all. If you look at the orbit, you will see how it is impinged upon by the bony growth. I take it that had surgical treatment been adopted in the earlier stage, the probability is that animal might possibly have recovered; at any rate one could have done no harm by opening the sinus, and having a look. I only saw this horse after the disease was so far advanced that it was quite clear the case was beyond the help of surgery. Conditions which give rise to a certain amount of trouble are those that we have to deal with in connection with the teeth. Here I have a case (specimen) of a horse which was kicked upon the face, a depressed fracture of the maxillary bone resulting. He eventually became paralysed without apparent reason. I only bring this statement forward as an illustration of how one may do a very considerable amount of harm by not operating, in the same way as one may also inflict considerable damage by needless interference. Had I extracted the 5th molar tooth the probability is that the paralysis, which, possibly, was reflex, might have been cured. You will see, on looking at this specimen, that the upper portion of the tooth is fractured, and a very considerable amount of disease has been going on, and keeping up the discharge which came through the nostrils. Here is a case where surgical interference might have been of very great value.

We now come to deal more particularly with the disease known as nasal gleet, a collection of fluid or pus in these sinuses. As to the causes which are likely to bring this about, I think, perhaps, the most common is the extension of an ordinary catarrh. An ordinary cold is very readily extended from the nostrils into the facial sinuses. We know perfectly well that common condition in ourselves, in which having an intense cold we feel it in the sinuses, producing a feeling of heaviness, an aching in the head, and due to extension of the diseased process from the nostrils into the facial chambers; and I have no doubt whatever in my mind that the process can readily be extended, by means of the communication which we spoke of a minute or two ago, viz., the common opening in the middle meatus. But we have other causes which undoubtedly operate in producing the condition of which we speak. Injuries to the front of the face to which horses are very liable, are not at all uncommon causes; but I must confess I have had many cases of nasal gleet with extensive bone disease, which I could not attribute to either injury or accident. Therefore, there are other causes of which I have no cognisance whatever, but which are distinctly operating in the production of this condition. Neither the 1st, 2nd, nor 3rd molar ever enters into any part of the facial chambers of the horse. It is only the 4th, 5th or 6th, and not very much the 4th. Therefore the disease of the 4th, 5th, or 6th tooth may be also a cause of nasal disease. Mr. Goodall, when I was speaking about this a few minutes ago, remarked upon the commonness of disease of the 4th molar tooth, and although my experience of the teeth is not very great, it certainly fits in with his idea that the 4th is more commonly diseased than any other. It is the oldest tooth in the head, and consequently is more prone to undergo certain changes, at any rate it is a point worth bearing in mind, that where we have any injury or disease of the 4th, 5th, or 6th molar, it may also be a cause of disease in the sinuses into which they extend. It is hardly necessary for me to take you in detail over the symptoms of this disease. In the earlier stages the discharge is from one nostril only—occasionally fetid, and often tinged with blood; these symptoms are followed by a bulging of the bones of the face, and perhaps by dullness on percussion. I have met with very many cases indeed where there has been no dullness whatever on percussion, where the diagnosis was attended with extreme difficulty, and the only way I can account for these differences is that the sinus must be quite full of fluid in order to give any dullness whatever on percussion; and if you consider that the opening into the nasal chamber is distinctly below the level of the frontal sinus there has to be some obstruction between the sinus and the cavity of the nostril to enable any of these places to become quite full of fluid. You may have a very considerable amount of tympany existing over your lower sinus, and yet it may be very much affected, simply because the fluid is discharged as fast as col ected. Where, however, the obstruction exists (and the case just exhibited is an example of such an obstruction), then undoubtedly, your sinus would become filled from its extreme lower to its extreme upper part, and so you would have a considerable amount of dullness. Dullness on percussion I place no reliance on whatever. There are other symptoms, perhaps, which one might be inclined to lay a certain amount of stress upon, for instance, an increased discharge from feeding a horse on the ground. We may have a certain amount of glandular enlargement, which may very reasonably be expected, but it is not of a specific character, and is simply the outcome of a very considerable amount of irritation. We may have, in long continued cases bulging of the bones of the face, when of course the thing is so palpable that "he who runs, may read." At any rate those of us who are in the service ought to have no bulging of this kind; but as we get our cases earlier than those who are engaged in private practice, I can quite understand one may have a considerable run of cases with bulging of the face, inasmuch as there is a very large proportion of owners who would put off taking their horses to the veterinary surgeon rather than incur expense. Bulging of the bones of the face may be so marked that as in a case on which I operated some years ago there was nothing but skin to open. In that case the absorption of the maxillary bone was so complete that nothing but skin was left, and I believe, had I left the case for a day or two longer it would have saved me a certain amount of trouble, by bursting. As a rule one side of the face only is diseased, but I have witnessed a double affection, and such a case is exceedingly difficult indeed to deal with. Now, as to the diagnosis; I hold that the only method on which reliance can be placed is by means of that exceedingly useful little instrument, the gimlet, and I believe that any man who keeps a

horse on his hands with a discharge from the nostril—a discharge of a non-specific character, which is not likely to make him feel anxious; if he keeps that horse on his hands without putting a gimlet in his head, he deserves all the trouble he gets. The longer those sinuses are bathed in pus, the more difficult will the case become. Therefore, I hold that in all these cases in which there is anything like a persistent discharge from the nostril, especially if associated with the slightest trace of smell, one ought to bore a hole in his head at once. Put in a gimlet, which is practically the exploring needle, and the whole tale will be out at once. We know perfectly well that a gimlet placed in a healthy head, is withdrawn with nothing but a little blood on it; on the other hand, if you have pus inside that sinus, your gimlet comes back filled with pus. Our methods to adopt are then perfectly clear. All persistent discharges from the nostril are no doubt very suspicious and no man ought to allow a case of persistent discharge to remain on his hands without making up his mind. He should do something to the sinuses towards placing them beyond suspicion. You have only got to open the lower part of the upper sinus and if the horse has any pus in his head you will certainly discover it. I have divided the treatment of this affection into medical, and surgical.

Medical treatment, I would rather have nothing to say about, because I hold exceedingly strong views. I certainly think no man has a right to tinker—that is the word to use here—with a horse by injecting material up his nostrils when he has got pus inside his head. That pus ought to be allowed to find its way out, just in the same way as you would no more think about tinkering with an abscess, but when it was mature, you would know that the thing treated on ordinary surgical principles would do well. If a sinus or its membrane is kept constantly bathed in this discharge, the longer operation is put off the more difficult will the case be to cure. Then that nasal insufflator, I don't know any instrument which rouses my ire more than that; I am now speaking of course solely of the treatment of disease of the sinuses. It may be exceedingly useful indeed for diseases of the Schneiderian membrane, or anything of that sort, but the idea of snuffing up powder in order to be able to cure inflammation existing in the enormous cavities of the face is to my mind puerile in the extreme. So in the same way, blistering. I cannot conceive that any good can be done by blistering. If you have made up your mind on the matter, there is only one thing to do, viz., the sooner you let the pus out the better, and blistering it may be useful after you have trephined, but with the object of putting off the evil day - the day of operation—I hold to be entirely wrong. I have put here in my notes—"Medical treatment is loss of valuable time"; it is temporising with the case; it is converting a curable into probably an incurable condition." Now, as to the surgical treatment. The surgical treatment of course is very simple indeed. We know pretty well the distribution of our sinuses. We know where we can get an opening, and all we have got to do is boldly saw out the piece of bone and practically cure our patient in the majority of cases. But a word or two about the instrument used. In this country we are using a trephine, which has probably been in existence 300 or 400 years. Trephining or Trepanning was a very common operation indeed in days gone by, both in human and veterinary practice; and I think the instrument which the majority of us are using at the present day is built on these antiquated principles. It has a screw on the top for the purpose of keeping the handle in position, but that screw bores a hole in your hand. It is very much in the way and the sooner the instrument makers wake up to the fact that a screw in that position is very awkward to work with the better will it be for both horses and operators. You cannot put on any amount of pressure when you have a screw bearing on the palm of your hand. Now, a handle very much like a pianoforte-tuner uses is much more like what we want; but even that is somewhat antiquated. Our brethren abroad (who do not teach us many practical lessons) use a thing very much like a drill—a thing that goes round and round; and they get their circular piece of bone out in no time: and although I do not say for one moment that that is the best form of trephine to use, yet I am certain that this wretched thing, with a screw on the top, is a very bad instrument. The crown of the instrument also is, in the majority of cases, too small. I do not believe that boring a hole in the horse's head, about the size of a sixpenny-piece, is of very much use. I like to see into it, and to be able to see the influence of my dressings. Moreover, with an ordinary mirror, and on a bright day, one is able to throw some light into the cavity of the head, and examine the interior of it in the most perfect manner; and, in order to treat a case properly, one must be able to examine it thoroughly. We know that these wounds are very difficult indeed to keep open, and that they have a great tendency to close up as rapidly as possible; and, if the orthodox cork is taken out, you cannot get the point of your finger in again. One object of taking out a piece of bone is to prevent this rapid closing. I believe in a good opening in the head; firstly, because it allows free discharge, and, secondly, it admits of the part being most thoroughly and carefully inspected, which is a very important matter. Now as regards the seat of the operation. I have occasionally to examine gentlemen for Her Majesty's Service, and as this is not at all an uncommon operation, it is one of those which they are asked some questions about; and I have been horrified at the various positions which have been selected as the place where a horse can have a hole bored in his head. It is not uncommon to say it should be bored in the central line, or in such a position as to hit off the fangs of the second molar teeth. Now, although this is quite foreign to the subject under consideration, yet it has an important bearing on the anatomical instruction which our students get. I am afraid a very large amount of the fault must lie with themselves; but it is quite clear that there is something wrong, and that something, especially when dealing with elementary anatomy, should be looked into by those who are responsible for the teaching of the men.

I say trephine high or trephine low; as high in the frontal as you can, and as low in the maxillary as you can for drainage. Suppose, for instance, you trephine, as many horses are trephined, an inch above and behind the zygoma, which hits off most perfectly the division which exists, what takes place? In the majority of cases your pus will deposit there. I trephine lower; I get as low as I conveniently can to the bottom of the sinus—because I know perfectly well my sinus will be constantly kept drained; and if you consider that to recover its healthy condition that sinus must always be kept empty, it is a very important matter to trephine as low as possible without affecting the teeth. Let us select an inch above the zygoma and an inch below (and supposing you trephine with an ordinary trephine, the size of a shilling), here is the position for the first opening, I generally trephine again immediately adjoining, and I invariably put in a third, and the sharp angles of bone I take off with a rat-tail file. That is the opening which will drain your sinus as far as possible without damaging the tooth. But with a trephine the crown of which was as big as a two-shilling-piece, I should not hesitate to place it in such a way that I would first of all open the division between the upper and lower sinus, and, secondly, open the lower sinus sufficiently far down to prevent the pus from pocketing. If you are frightened (in the majority of cases these sinuses do run very funnily) of going too high, there is no objection to trephining in the ordinary

manner first; and, if you find with your finger you can go higher, and you are able to thoroughly disinfect the whole membrane. I believe, therefore, in trephining high and trephining low, and having a really good opening for the drainage.

The nature of the contents on opening the head will depend entirely upon the length of time that they have been bottled up. Where it has been bottled up for some months it comes out as pus, no doubt, and often with a very unpleasant smell; but where the head has been opened within a reasonable time it is more of a muco-purulent nature than of a purulent. The condition in which we find the membrane is a very important one; it is perfectly gelatinous, and a quarter-of-an-inch or half-an-inch in thickness. We set to work, and we wash out the whole of the head; we establish a thorough communication between the upper opening and the lower, and of both openings with the nostrils; and then what should we do? I hold the next step in our proceeding should be to thoroughly destroy, by means of some cauterising agent, this pus-secreting membrane and convert it into a mucus-secreting membrane. This is very difficult indeed, and I believe the very best possible agent we have for that purpose is very strong solution of chloride of zinc. The effect of zinc-chloride dressings is to destroy the whole of this gelatinous membrane; and in the course of a day or two we find there is a very nice pink basement membrane left as the result of the cautery. And now, if our case is going on fairly satisfactorily, we get a very slight discharge indeed, for the reason that the vessels which have been secreting have been practically destroyed. I have used many other agents besides chloride of zinc, but I believe this offers the best means for the purpose. As to its strength, I am afraid the strength I employ is somewhat empirical. I use it in sufficient strength to scorch the membrane. It converts it into a white thing very much like a piece of flannel. In a very few days this slough is cast off, and a very healthy condition appears. We generally hold—at any rate it appears to be the feeling of the profession—that sinuses ought to drain through the nostril. Now, I may perhaps explain how I set to work to force a nasal passage where one will not come of its own accord. Let me suppose I have got my head trephined, as mentioned, and I am washing out the upper opening with a hose fixed on to a tap. I have got large quantities of material coming out over the side of the face; but I cannot get any to come back through the nostril. I plug a piece of sponge into the lower hole, and I put on a lot of pressure above. I overcome something—something comes away; in a very few seconds volumes of water will be pouring down the nostril, much to one's satisfaction. Having established this opening, some practitioners—in fact I did for years past—run a piece of tape from the upper opening to the lower one, which was generally spoken of as a seton. It passes through the natural-communicating opening, and comes out through the trephined opening; and it was supposed to keep these two wounds open. As a matter of fact, I have not used these pieces of tape for many years past, and I find I get on as well without them. Our next step is to put something into the wounds which have been made in order to prevent them from closing, and I really think the very best thing we can use is the old-fashioned cork. Perhaps a champagne cork offers the best shape for the purpose, because you know you can press it any distance without losing it. But in closing the orifice entirely (I think this is a most important practical matter) we have made a mistake. The ordinary cork put in has exactly the opposite effect to that which we want to bring about; it bottles up the inflammatory matter, and when we take it out a quantity of material escapes from it. This closure is utterly wrong. A plug seems to be essential, but it should be perforated with a piece of glass tube to allow the discharge to pass out. All the corks I use for the lower opening have a piece of glass tubing running through; and by that means I do not have a particle of material collected. For the first day or two I like dressing two or three times a day, simply washing out with plenty of water. After that, in the course of three or four days, morning or evening dressing is sufficient. If you have your tube of decent bore passing through the plug nothing will collect in the sinuses. At any rate, a solid plug should never be left in, because it has the exactly opposite effect to that intended. There are many instances where we have to work without a satisfactory hose for the purpose of washing out the cavities; but this may be excellently performed by means of an ordinary Read's enema, or an ordinary funnel. They are not so convenient as using a hose; but where you have no hose they are as perfect a method as you can devise; and I hold this thorough flushing out with water is one of the essentials of the treatment. In the Service a 2oz. syringe is provided for this purpose, and is absolutely useless. If the gelatinous membrane is left you will have more pus formed. I have scraped it down with my fingers as far as I could, but remember the size of these cavities, and think of the distance they run in places which you cannot reach; think how useless it would be to depend upon this. Nothing, therefore, but the cautery—viz., such agents as I have spoken of—can be of the slightest use. You cannot get far enough with your fingers. I think, in carrying out the treatment, feeding off the ground is very desirable. It assists in carrying the discharge away if there is any tendency to obstruction. If our case is doing well, we now find—that our slough gets cast off, that the gelatinous membrane comes away, that we have got a nice pink membrane left behind, and that the discharge has absolutely ceased. For the first two or three days, whilst the slough is coming away, you must make up your mind that you will get a certain amount of discharge, shreds of membrane, etc. Gradually the whole of this membrane comes away, and, by using a mirror, we are able from day to day to gauge how our case is going on. With sunlight thrown in below, we have the whole sinus practically at our fingers' ends; and if any places still exist on the inside of the sinus, which appear to have escaped the caustic action, the caustic should be re-applied. I cannot help impressing upon you the value which the mirror has been to me in the treatment of disease of the facial sinuses of the horse.

The length of time which these sinuses should be kept open depends upon how the case is doing. I think, however, they might reasonably be allowed to close at the end of three weeks if we can make up our mind that the gelatinous membrane is entirely destroyed; but I have kept them open for weeks where doubt existed. If the case is doing badly, we continue to get a discharge, and in such cases I cast the horse at once, and examine, because you never can do this thing thoroughly standing. There is evidently some part which has not been got at, and it is easier to get at when the horse is down; and I may even consider it necessary to apply the chloride of zinc to every part where I can; and this has been attended with very satisfactory results. There is a condition in which no amount of treatment appears to be of the slightest use—as fast as you break down the gelatinous membrane so fast does it form again. You may even scrape out the interior of the head to no purpose. Now, what happens is most perfectly illustrated in the specimen which I exhibit. The tendency in chronic nasal gleet is to form bags of pus in all the sinuses, which bags do not communicate one with the other; but, in the majority of cases, communicate directly or indirectly with the nose. In the specimen exhibited you will also observe a tumour in the middle of the antrum which blocks up the communication of the sinuses with the nasal chamber. The cases which do not progress favourably are cases in

which these pus-bags are present, which as rapidly as they are destroyed appear to form again. At all events, we must destroy these sacks entirely, and must go so far as scraping the whole of the surface inside the sinus by means of a scraper. Once I scraped a membrane entirely away, and it was followed by a most profuse hœmorrhage; and the only method I could adopt to avert it was to plug the same with tow, which had a most satisfactory effect: previously no amount of cold water on the face or the wound was of the slightest use. I simply stuffed it with tow, and the hœmorrage gave no more trouble. We find these pus-bags are distributed all over the interior of the sinus, and in some cases the turbinated bones have become diseased. In addition, not uncommonly, the bones are thickened to such an extent that the case is perfectly hopeless. In the specimen exhibited we have a considerable thickening of the right side of the head. I am not so certain that nasal gleet does not occur on the right side more commonly than the left. In conclusion we have the question of dentistry. I believe that where we have got a very chronic discharge or irritation of those sinuses that we ought to place beyond all shadow of doubt the fact whether our 4th, 5th and 6th molar teeth are sound or not. Even I should go so far as to extract the 4th molar. In one case I did extract the 4th molar. Firstly I was under the impression that it was diseased, and secondly, I wanted to establish drainage into that horse's mouth. I have nothing more to add. I have touched on all the practical points, and I look forward with considerable interest indeed to the discussion which will follow. (Cheers).

EXTRACTS AND NOTES.

ARE INJURIES AND MUTILATIONS HEREDITARY?

A correspondent writes to *The Field* as below on this most interesting point. "A question much debated of late years is the real or supposed heredity of mutilation. It is very commonly asserted that the old English bob-tailed sheepdog is tailless, owing to the fact that for many generations both parent sexes have had their tails artificially shortened. Weismann ("Essays on Heredity.") strongly denies the transmission of the effects of mutilation by heredity, and denounces a catalogue of such cases as a "handful of anecdotes;" and there can be no doubt that in at least the majority of instances he is correct. Is the Manx cat tailless because at some period long ago their ancestors had their tails artificially shortened? And how comes it that sheep, such as the Southdown, although they have had their tails amputated for a century, never produce tailless lambs? The same question may be asked in reference to horses. Congenital malformation is doubtless hereditary, but it is difficult to believe that accidental blemishes are transmitted.

Weismann points out that there are races of sheep in which the shortness of the tail is a distinguishing feature, and therefore the nature of the sheep's tail does not imply that it cannot disappear. Furthermore, he says that mutilation of certain parts of the human body have not in a single instance led to the malformation or reduction of the parts in question. He refers to a well-known Jewish rite, to the custom among some uncivilised tribes of removing the front teeth, of boring holes in the lips and nose, and to the artificial crushing and crippling of the feet of Chinese women. "No child," he adds, "among any of the nations referred to possesses the slightest trace of these mutilations when born; they have to be acquired anew in every generation." He also notes that various species of crows possess stiff, bristle-like feathers round the opening of the nostrils and the base of the beak. They are present in the young rook while in the nest but absent in the adult bird. The bristles get worn away as soon as the young one has adopted the practice of digging for food. Nevertheless, this peculiarity, which has been acquired again and again from time immemorial, has never led to the appearance of a newly-hatched individual with a bare face.

[On this the Editor of *The Field* in a foot note says—"This 'abrasion theory' has been much discussed. Many letters appeared in *The Field* in years past; and it was shown that the feathers had fallen off the beaks of rooks kept in confinement under circumstances where they could not dig. As to fox terriers, we have had them born with short tails; and within a couple of months three or four correspondents have sent us particulars of their fox terrier bitches giving birth to puppies 'ready docked.']

Dr. Zacharias, at a meeting of German naturalists at Wiesbaden in 1887, showed some tailless cats, the progeny of a cat which "was said" to have lost her tail by being passed over by the wheel of a cart. It appeared, however, on subsequent investigation, that several other cats in the neighbourhood from which the tailless cats were brought had given birth to tailless kittens. It was also discovered that an English lady, having married a clergyman in the neighbourhood, had brought a male Manx cat with her. I have, however, seen a family of cats two generations of which had a kind of "kink" in their tails, as if the tails had once been fractured or broken in the middle. It was said that the mother of the first kittens having this defect had her tail smashed by the closing of a door. I had no means of testing the truth of the statement, nor any aid to further investigation.

I know, however, of an instance of a one-eyed mare bought for breeding purposes. The eye was not wholly obliterated, and, as usual, the seller said the blemish was the result of an accident rather than of disease, and therefore not likely to produce foals with a predisposition to become blind. The first foal she had was from birth stone-blind in one eye, and that on the same side as in the case of the dam. The colt's eye was perfect to all appearances, but the pupil was insensitive. I state facts within my own personal knowledge. I knew both animals; they belonged to my brother, who lived with me on the same farm.

Perhaps this latter can best be accounted for in somewhat the same way that Weismann suggests in the frequently quoted case of the soldier who lost his left eye by inflammation fifteen years before he married, and who had two sons with left eyes malformed (microphthalmic). Weismann says "Microphthalmia is arrest of development. The soldier did not lose his eye simply because it was injured, but because it was predisposed to become diseased from the beginning, and readily became inflamed after a slight injury received."

ANOTHER VETERINARY MAYOR.

Mr. Alderman BUDD, in rising to nominate the Mayor for the ensuing year, said it required a man of no little courage to undertake the arduous, though honourable, duties of mayor of that borough immediately after Mr. Lake, who had so admirably discharged the duties of the office (applause). When he mentioned the name of Mr. William Penhale—(applause)—he was sure that not only his worship and every member of the Council, but every inhabitant of that borough also, would be satisfied that a more worthy man could not fill the position (hear, hear). He knew of no man in the borough of Barnstaple who for his ability, his integrity, his amiability, and his devotion to business, was better qualified than Mr. Penhale to adorn the highest office that his fellow townsmen could confer upon him (applause). He was no stranger to them, they all knew him, they were all proud of him (applause).

Mr. W. A. ROBERTS said he rose with pleasure to second the nomination of Mr. Penhale, because during the last ten or eleven years he had known him personally, and because he held that when a man succeeded in his own business or profession it qualified him in great measure to undertake public duties, such as those that appertained to the office of Mayor of that borough (hear, hear). The civic chair had been filled by men of proved ability and distinction ; and he had no fear that Mr. Penhale would maintain the traditions of the office which Mr. Lake had so worthily held (applause). It was, he believed, an unique distinction, that Mr. Penhale was the first member of his profession who had filled the Mayoral chair in Barnstaple, and it showed the strides that science—and especially that branch of science which he so eminently practised—had made during the last fifteen or twenty years (hear, hear). He joined with Dr. Budd in wishing Mr. Penhale happiness during his term of office, and he assured him he would receive that support which the Town Council had always been willing to give to the gentleman who occupied the highest position in the town (applause).

The resolution was put and carried unanimously.

Mr. PENHALE then ascended to the Bench, and the outgoing Mayor, amid applause, placed the robe and chain of office on the shoulders of the newly-elected Mayor. Mr. Penhale then took the usual oaths. Having done so,

The MAYOR said he scarcely knew how to express himself in recognition of the kindness which the Town Council had shown him. He knew his own shortcoming ; he knew he did not deserve, and had done nothing to deserve, all the praise they had lavished upon him. But he was bound to admit that it was no empty compliment they had paid him, for they had handed over to him the highest position and most exalted and dignified honour it was possible to confer on any citizen (hear, hear). In Barnstaple, the town of his adoption, he had during the seventeen years of busy life—and trouble—he had spent there, always received the kindness and sympathy of his fellow townsmen ; and, if by accepting that office, he could further the interests of the town, it was clearly his duty to do so (applause). He was told that in order to be a good chairman it was necessary to possess three attributes. First of all, he must be good looking—(laughter) ; secondly, he must keep order ; and, thirdly, he must make up any deficiency in the collection (renewed laughter). Well, they had had a succession of good-looking Mayors, so the first of those had been paid in advance before he accepted office. In regard to keeping order he had the promise of the whole Council in that, and therefore they could not fail upon that point ; while as to the collection, that of course must mean the borough rate, and with such an excellent Chancellor of the Exchequer as they had in that borough they were not likely to run short of funds during the coming year (hear, hear). When he first entered the Council nothing surprised him more than the amount of ability displayed by gentlemen who had carved out a fortune for themselves in the professional and business world, and he felt that if these gentlemen were willing to give their time and attention to the public affairs of their town, it was no time for him to lag behind, weak instrument though he might be. He might, perhaps, be excused if he felt some pardonable pride and pleasure in presiding over a corporation constituted as that was (hear, hear). He was well aware the post was no sinecure, and he believed that the development of the County Council system would give increased responsibilities and larger powers to the Town Council (hear, hear). Then, again, the Council had quite recently taken over the management of the Science and Art Schools in the town, which had added considerably to its work. He, therefore, accepted the office with considerable misgivings, and specially when he considered his inaptitude for the work. However, with the promise of the Council's assistance, he trusted they would have a prosperous and peaceful year, and he hoped they might preserve, and it maybe improve, this pretty and not unimportant borough, which, through the kindness of their benefactor, Mr. Rock—(applause)—and other generous-hearted persons, had been so much beautified in recent years (applause). He thanked them for the confidence they had reposed in him.—*North Devon Herald.*

CHARGE OF CRUELLY DOCKING.

John Taylor, blacksmith, Barnsley, was charged with having cruelly ill-treated, abused, and tortured a certain horse, by "docking" the same unskilfully at Barnsley, on the 28 ult.—Mr. Rideal, who prosecuted on behalf of the local branch of the Society for the Prevention of Cruelty to Animals, said the mare had been sent to the defendant, who was a blacksmith, for the purpose of being "docked." He was not going to contend against proper "docking." On behalf of the society, he did contend that the "docking" should be carried out in a proper manner. A veterinary surgeon examined the horse a week after. He found it had been "docked" in the middle of the bone instead of the joint. Instead of it being "seared" with a hot iron it had been simply tied above the wound with string. The stump had gathered. The society thought that in cases of this sort it would be better for "docking" to be done by properly qualified men At all events, he submitted that was a case, if the facts were borne out, of gross cruelty to the horse.

Henry Berry, groom, stated that he took the mare to the defendant's shop on the 28th of September, and when he took her back again he found it had been "docked." The mare was now quite well. The tail had not gathered.—Cross-examined : He had been summoned for cruelty. He did not hear that there was blood on the splash-board, and that the horse never ought to have been used.

Benjn. Smith, F.R.C.V.S., Veterinary Surgeon, Barnsley, said he was called to examine the mare on the 5th inst., he examined the tail, and found that it had not been "docked" in the joint : it was improperly done. There was a string tied around the tail to stop the hœmorrhage. It should have been stopped by a hot iron. The stump was very much swollen, and the bone was completely embedded. The stump should have been seared with hot iron. The mare was in pain, and had been since the time of the operation. There had been no skilful treatment.

Cross-examined by Mr. Carrington: You have 'docked' many horses?—Witness: Yes.—Has it ever been your misfortune to miss the joint in the course of "docking?" Not once in a hundred times.—Have you ever missed? Yes.—Then even a skilful hand may make some mistake? Yes, but not in such a manner as in this case.—The veterinary surgeons generally go to work in the same way? I don't know.—Do you mean to say that to use a hot iron to sear the place after docking is universal? I never knew a case of docking where it was not.—Well, I am going to call a veterinary surgeon who never used an iron in his life. Well, he will be a novelty.—Have you ever known it to be a practice to tie a ligature round the tail, about an inch and a half above the docking? No.

Re-examined:—The case was one of great cruelty.—Mr. Carrington for the defence submitted it was not for the defendant to prove his innocence, but for the prosecution to prove him guilty. There had been no evidence yet that the defendant was the person who did the "docking."

The Chairman, said it would be difficult to draw a hard and fast line in "docking." There had been no evidence against the defendant, and they did know horses would not stand still and allow them to do as they liked to their tails, therefore there was some little difficulty. He dismissed the case.—*The Barnsley Chronicle.*

License to Practice in Egypt.

Le Journal Officiel (Cairo) publishes a decree annulling all the rights of the Egyptian Government to authorise or refuse licences to practise medicine, pharmacy, veterinary surgery, dentistry, or midwifery, to open pharmacies or shops for the sale of poisons, or to use poisons in factories, notwithstanding all former decrees to the contrary. Henceforth licences to exercise the above businesses will be delivered simply on application on paper bearing a stamp of three piastres.

Poison in Artichoke Leaves.

A communication has recently been made to *Cosmos* by Mons. Pauthier, of Senlis, concerning a very curious fact which he has observed. There has been hitherto no reason for believing that any part of the globe artichoke plant has a toxic effect upon the human economy when taken directly; yet should cows accidentally partake of the leaves, their milk for the time being becomes distinctly dangerous to health if used by children, or others of weak digestion. The symptoms are those of poisoning, the patient vomits and suffers from diarrhœa. Chemical analyses of the leaves and of the affected milk, has revealed the presence of a substance which is known to chemists by the name of cyanurin. Obviously, care should be taken not to feed cows, or allow them accidentally to feed, on the leaves of artichokes, because their milk for some hours afterwards contains a noxious principle which is capable of causing serious complications in the system of a person, especially a child, who should partake of it. Moreover, there is no particular reason why cows should be allowed to eat artichoke leaves, even when there are plenty of them, because as a food they possess a low value.

CORRESPONDENCE.

THE CHARGE OF CRUELTY AGAINST A VETERINARY SURGEON AT LLANDUDNO.

SIR,

If Mr. Greaves will re-read your number for Oct. 31st he will see that it was not your correspondent, as his letter would imply, who was guilty of the spitefully-"excited and ill-regulated mind;" but the editor of a society newspaper. Since my first communication a second society paper has taken up the case on almost the same lines, and was threatened with legal proceedings for his criticism thereon.

Mr. Greaves' letter contains a slight discrepancy. We are first of all told that the proper instrument was used for the destruction of the mare, and in the next paragraph we are told there was no shot-gun, "no knife, no knacker, no nothing."

I still hold that unless Mr. Booth was armed with proper apparatus, and had sufficient nerve to rapidly destroy a horse before an "excited dense crowd of two or three thousand people," that it would have been better for him to have left it alone; and this, no doubt, is Mr. Booth's own opinion after all he has gone through.

The prosecution for cruelty is a shameful one; judicially it would probably be called a "bungling execution." The only lesson we have to learn, and circumstances have frequently directed our attention to it before, is not to play the knacker's part in public or private. The R.S.P.C.A. is doing its best to destroy the confidence of the profession in its *bona fides*.—Yours, etc.,

BUCK-SHOT.

REGISTERED SHOEING SMITH OR REGISTERED FARRIER.

DEAR SIR,

Possibly the following case may interest some readers of *The Record*:—A few days since a contractor in this town had a horse that picked up a nail which punctured the foot near the point of the frog for about 1½ inches. The animal was taken to the owner's regular veterinary attendant (a registered shoeing smith), who scraped the hair around the puncture for about half-an-inch, and applied green ointment. Four hours after this animal was found at work very lame by an inspector of R.S.P.C.A., and brought for my opinion. I found it very lame at a walk, constantly shifting the foot, and blood oozing from the wound. Consequently I said it was unfit for work. The inspector interviewed the contractor, who informed him that he had the animal attended to by the R.S.S., who advised him to work it; but that he would not have worked it had there been another horse in the stable. The contractor and the driver were summoned, and for the defence the R.S.S. was called; and, in reply to the question, what are you? said he was a "Registered *farrier*." This question was again put and the same answer given. I was appealed to, and I informed the magistrates that he was a Registered Shoeing Smith, to which he replied, "Yes, I believe that is right." The magistrates dismissed the case, "as the owner had made an effort to get advice about the animal. They gave the defendants the benefit of the doubt as to a knowledge of the lameness; but advised them in future, under such circumstances, to get the advice of a qualified veterinary surgeon." Yours truly, F. G. ASHLEY, V.S.

Broad Street, Bath; *Nov.* 16, 1891.

COMMUNICATIONS, BOOKS, AND PAPERS RECEIVED:—Messrs. F. G. Ashley, W. H. Bloye, P. Moir, W. Mole, T. B. Goodall. "North Devon Times," "Journal of Comparative Medicine and Veterinary Archives" (November) New York, "The Baltimore Sun."